

Appl. No. 09/505,830  
Amdt. dated March 11, 2004  
Reply to Office action of December 31, 2003

Amendments to the Specification:

~~Amend~~ the paragraph beginning at page 5, line 6 as follows:

*a*  
--Non-Volatile Memory circuit 20 is connected to a ~~KVG-68~~  
KGV-68 encryption device 24 which allows Non-Volatile Memory  
circuit 20 to load a crypto key with its corresponding check word  
into the encryption device 24. The encryption device is  
connected to a telemeter transmitter 26 which transmits encrypted  
telemetry data from an encryption device 24 to a ground  
station.--

*2d*  
~~Amend~~ the paragraph beginning at page 7, line 1 as follows:

--At this time it should be noted that the software of  
Appendix A is adapted for processing two KVG-68 although only one  
is illustrated in FIG. 1. In a security upgrade configuration  
the software operates in a manner which allows two KGV-68  
encryption units to be loaded with a crypto key and its  
corresponding check word. It should be noted that while FIG. 1  
only shows one ~~KVG-68~~ KGV-68, the non-volatile memory comprising  
the present invention may be easily modified to accommodate to  
KVG-68 KGV-68 encryption units.

Appl. No. 09/505,830  
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Amend the paragraph beginning at page 7, line 22 as follows:

--The XMTR\_DISABLE output from microprocessor 32 is set high during initialization to disable transmitter 26.

*a3*  
The ENCR\_SENSE\_IN output from microprocessor 32 is set low during initialization indicating that the ~~KVG-68~~ KGV-68 encryption device 24 is not being loaded. The ENCR\_FCLK and ENCR\_FDATA outputs from microprocessor 32 are set high during initialization. The clock signal provided by microcontroller 32 at the ENCR\_FCLK output from micrcontroller 32 has an active falling edge necessitating that the signal be set high during initialization of micrcontroller 32. Setting the ENCR\_FDATA output from microprocessor 32 high results in "0" at the ENCR\_FDATA output of microprocessor 32.--

Amend the ABSTRACT beginning at page 23, line 1 as follows:

--A Non-Volatile Memory circuit ~~which functions~~ operating as an interface between a key loader and an encryption device.

~~Included in the~~ The Non-Volatile Memory circuit ~~is~~ includes a microcontroller which ~~has an EEPROM adapted for storage of~~ stores a crypto key and ~~its corresponding~~ checkword and ~~also~~ a backup crypto key and checkword. ~~Connected to the~~ microcontroller is a ~~4 MHz~~ clock signal generator which supplies the master clock

Appl. No. 09/505,830

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~~signal to the microcontroller. A pair of light emitting diodes are also connected to the microcontroller to indicate the status of a load of the crypto key within the microcontroller as well as the status of an erase of the crypto key from the microcontroller.~~ The microcontroller is ~~also~~ connected to the telemeter transmitter for ~~the~~ a missile. ~~This allows allowing~~ the microcontroller to turn off the transmitter during a key load which prevents transmission of the crypto key and ~~its~~ corresponding checkword. When the microcontroller completes a load of the crypto key ~~from its internal EEPROM~~ to the encryption device and upon a launch of the missile, the software within the microcontroller erases the crypto key and ~~its corresponding~~ checkword from ~~its~~ an internal EEPROM. This prevents an enemy force from retrieving the crypto key and its corresponding checkword from the missile after launch.